



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

(801) 538-5340 telephone

(801) 359-3940 fax

(801) 538-7223 TTY

www.nr.utah.gov

Michael O. Leavitt
Governor

Robert L. Morgan
Executive Director

Lowell P. Braxton
Division Director

September 24, 2002

Gary Gray, Resident Agent
Genwal Resources Inc.
P.O. Box 1077
Price, Utah 84501

Re: South Portals, Genwal Resources Inc., Crandall Canyon Mine, C/015/032-AM02A,
Outgoing File

Dear Mr. Gray:

The above-referenced amendment has been reviewed. There are sixteen deficiencies that must be adequately addressed prior to approval. A copy of our Technical Analysis is enclosed for your information. In order for us to continue to process your application, please respond to these deficiencies by December 24, 2002.

If you have any questions, please call me at (801) 538-5268 or Karl R. Houskeeper at (435) 613-5330.

Sincerely,

A handwritten signature in cursive script, reading 'Pamela Grubaugh-Littig'.

Pamela Grubaugh-Littig
Permit Supervisor

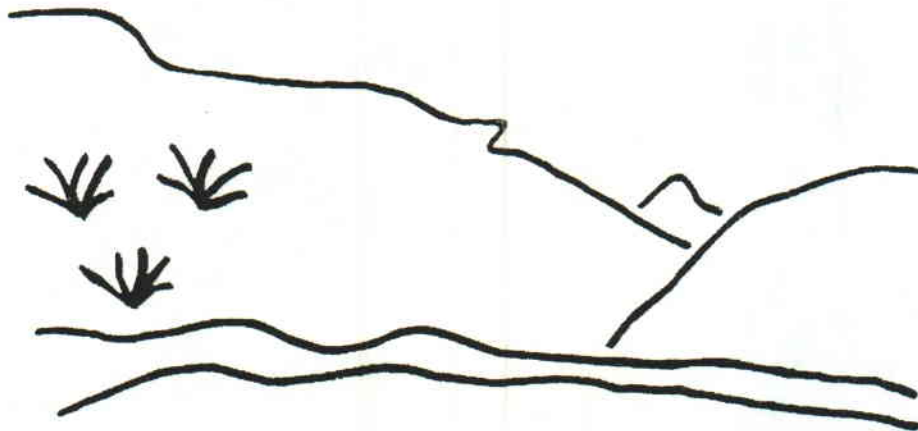
KRH/sd

Enclosure

cc: Price Field Office

O:\015032.CRA\FINAL\DEF02A.DOC

State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Crandall Canyon Mine
South Portals
C/015/032-02A
Technical Analysis
September 19, 2002

TABLE OF CONTENTS

INTRODUCTION.....	3
SUMMARY OF DEFICIENCIES.....	5
GENERAL CONTENTS.....	7
PERMIT APPLICATION FORMAT AND CONTENTS	7
COMPLETENESS.....	7
ENVIRONMENTAL RESOURCE INFORMATION	9
SOILS RESOURCE INFORMATION.....	9
OPERATION PLAN	11
MINING OPERATIONS AND FACILITIES.....	11
AIR POLLUTION CONTROL PLAN.....	12
SUBSIDENCE CONTROL PLAN.....	14
Subsidence Control Plan.....	14
TOPSOIL AND SUBSOIL.....	16
Topsoil Removal and Storage.....	16
HYDROLOGIC INFORMATION	19
Diversions: General	19
Diversions: Miscellaneous Flows	19
Stream Buffer Zones	20
Siltation Structures: Sedimentation Ponds.....	20
MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS.....	20
Mining Facilities Maps	21
Mine Workings Maps	22
Certification Requirements	22
RECLAMATION PLAN.....	25
GENERAL REQUIREMENTS	25
TOPSOIL AND SUBSOIL.....	25
Redistribution.....	26

TABLE OF CONTENTS

TECHNICAL ANALYSIS

September 19, 2002

TECHNICAL ANALYSIS

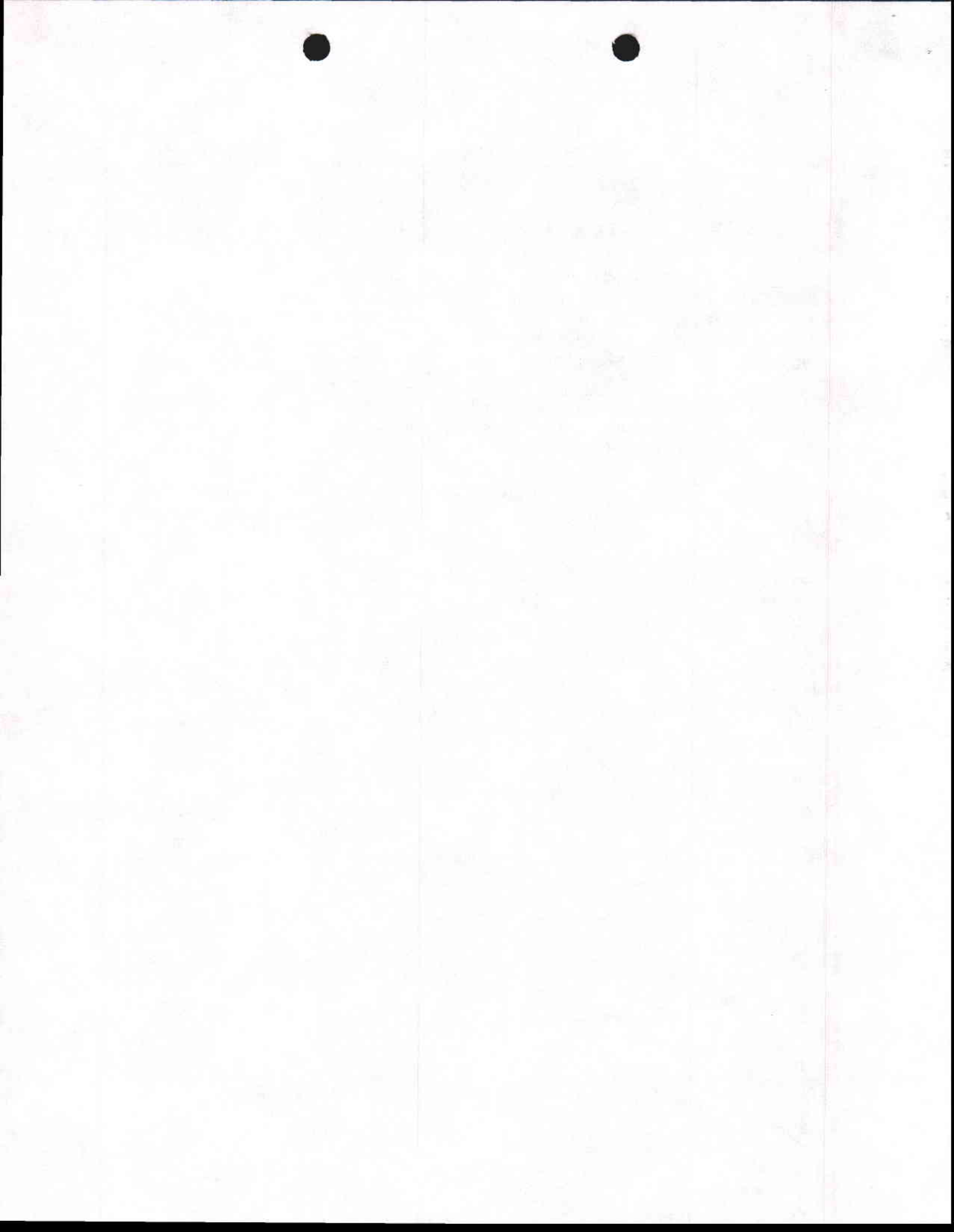
The Division regulates the Surface Mining Control and Reclamation Act of 1977 (SMCRA). When mines submit a Permit Application Package or an amendment to their Mining and Reclamation Plan, the Division reviews the proposal for conformance to the R645-Coal Mining Rules. This Technical Analysis is such a review. Regardless of these analyses, the permittee must comply with the minimum regulatory requirements as established by SMCRA.

Readers of this document must be aware that the regulatory requirements are included by reference. A complete and current copy of these regulations and a copy of the Technical Analysis and Findings Review Guide can be found at <http://ogm.utah.gov/coal>

This Technical Analysis (TA) is written as part of the permit review process. It documents the Findings that the Division has made to date regarding the application for a permit and is the basis for permitting decisions with regard to the application. The TA is broken down into logical section headings which comprise the necessary components of an application. Each section is analyzed and specific findings are then provided which indicate whether or not the application is in compliance with the requirements.

Often the first technical review of an application finds that the application contains some deficiencies. The deficiencies are discussed in the body of the TA and are identified by a regulatory reference which describes the minimum requirements. In this Technical Analysis we have summarized the deficiencies at the beginning of the document to aid in responding to them. Once all of the deficiencies have been adequately addressed, the TA will be considered final for the permitting action.

It may be that not every topic or regulatory requirement is discussed in this version of the TA. Generally only those sections are analyzed that pertain to a particular permitting action. TA's may have been completed previously and the revised information has not altered the original findings. Those sections that are not discussed in this document are generally considered to be in compliance.



INTRODUCTION

September 19, 2002

INTRODUCTION

The Division received proposed changes to Genwal Resources Inc., Crandall Canyon Mine on July 17, 2002. The proposed changes involve the construction of three new portals in the coal outcrop located on the southern slopes of the disturbed area.

Plans call for the installation of one new culvert, a ventilation fan, three portal face up's, a conveyor belt, removal and placement of 110 cu. yd's of topsoil.

A review of the amendment shows that reclamation costs pertaining to the redistribution of soils and the removal and/or demolition of the coal conveyor, portal face up's, culvert and ventilation fan have not been discussed or included. Associated reclamation costs need to be discussed and submitted for the reclamation of these facilities in order to determine if the current bond needs to be adjusted.

The Crandall Canyon Mine was given approval on June 25, 1997 to cover native soils with geotextile fabric, rather than salvage the topsoil prior to culverting the stream. During this previous activity, 1.10 acres of stream channel and 1.53 acres of steep slope were covered with geotextile fabric. The procedure was to cover the in-place topsoil with geotextile fabric and to separate the geotextile from the fill with a layer of different colored fill (marker soil). This procedure should be followed again with the south portal construction.

The current proposal is to cover additional acreage on the slope with geotextile fabric in areas to be covered with construction fill. The acreage to be buried under geotextile should be provided by the Permittee. An assurance of the non-acid/non-toxic forming nature of the fill should be provided. Also, an evaluation of the gravel pit for the presence of noxious weeds should be conducted by the County Weed Supervisor or a representative of the Utah Department of Agriculture.

Page 4

C/015/032-02A

September 19, 2002

INTRODUCTION

SUMMARY OF DEFICIENCIES

September 19, 2002

SUMMARY OF DEFICIENCIES

The Technical analysis of the proposed permit changes cannot be completed at this time. Additional information is requested of the permittee to address deficiencies in the proposal. A summary of deficiencies is provided below. Additional comments and concerns may also be found within the analysis and findings made in this Draft Technical Analysis. Upon finalization of this review, any deficiencies will be evaluated for compliance with the regulatory requirements. Such deficiencies may be conditioned to the requirements of the permit issued by the division, result in denial of the proposed permit changes, or may result in other executive or enforcement action and deemed necessary by the Division at that time to achieve compliance with the Utah Coal Regulatory Program.

Accordingly, the permittee must address those deficiencies as found within this Draft Technical Analysis and provide the following, prior to approval, in accordance with the requirements of:

Regulations

- R645-301-121.100**, The plan must contain current diversion information. The Sedimentation and Control Plan in Appendix 7-4 is unclear as to which culverts have been placed on the property and which are still in the planning stage. This must be updated. 20
- R645-301-121.200**, The maps and text in the plan must be clear and concise. The location of DD-12 must be properly marked and any improper labels must be omitted from the maps. Lengths reported in the text must coincide with measured lengths on the maps..... 22
- R645-301-121.300**, The revised date shown on all the submitted pages in the lower left hand corner of the page needs to be updated. 9
- R645-301-150**, Correct the subtotal sum for Areas Not Topsoiled on page 2-10..... 10
- R645-301-222.100**, The soil survey map referred to on page 5 of Appendix 2-6 could not be found. 11
- R645-301-231.400**, (1) The plan must describe the current and proposed acreage of topsoil protected by geotextile and describe the type of geotextile used. The acreage could be shown on a figure. (2) Laboratory testing of the fill derived from the portal excavation and the Nielson Construction site is required to provide an assurance of non-toxicity, non-acidity for protection of the buried in-place topsoil. (3) The condition of the gravel pit should be re-evaluated for noxious weeds by the County Weed Supervisor or a representative of the Utah Department of Agriculture before use. (4) The quantity of imported fill must be disclosed with as-built plans..... 17

SUMMARY OF DEFICIENCIES

- R645-301-231.400**, The submittal must indicate that As-Built maps of Topsoil Pile #4, Plates 2-5, 2-5A, and 2-5B, will be provided after soil salvage for construction of the south portals is completed. 19
- R645-301-232.100**, Based upon the information supplied in Appendix 2-6, the Permittee should plan for 220 cu yds of topsoil salvaged and stored in the #4 Topsoil pile (page 2-11) and a replacement depth of 16 inches for the south slope portals (page 2-10). 19
- R645-301-512**, The maps should be reviewed and certified by a P.E. to verify their accuracy. The maps have been stamped, but do not have a signature and date to validate that they were reviewed. Plates 7-5, 5-2, and 5-3 must be revised and submitted to the Division with the proper P.E. certification (signed and dated). 23
- R645-301-521**, Plate 5-2 needs to be revised to accurately depict the mining projections (i.e. three portals not six portals). The mining projections need to be revised to indicate a 200' barrier between the outcrop, as indicated in the approved MRP. Mining sequence and timing for the proposed area needs to be addressed in the amendment and incorporated into the submittal and/or map. 15
- R645-301-521**, Plate 5-2 needs to be revised to properly reflect the proposed mining activities. The plate should also include timing and sequence information and commitments made in the approved MRP on page 5-21, i.e., 200' barrier between mining activities and the outcrop. ... 22
- R645-301-525**, The amendment needs to address if the current subsidence control plan addresses this area of mining or if modifications are necessary. 15
- R645-301-526**, A comprehensive description of all the proposed facilities, size, materials, maps, cross sections, permits, etc., needs to be included in the amendment. 14
- R645-301-528**, A complete narrative explaining the construction, modification, use, maintenance, and removal of facilities needs to be included in the amendment. 14
- R645-301-542**, All plans, maps, surface configurations, timetables, demolition, costs, etc., needs to be submitted for review and approval. No information was submitted. 25
- R645-301-724**, The amendment needs to address if the current baseline data for hydrologic, geologic, and climatologic information applies or if additional baseline information is required. 15
- R645-301-830**, Bonding amounts should be reviewed and adjusted as necessary to cover the additional facilities. No information was submitted. 25

GENERAL CONTENTS

GENERAL CONTENTS

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

Information submitted in the permit amendment relative to the South Portals included changes to Chapter 1, Legal, Financial, Compliance, and Related Information. The submitted changes are listed as follows.

- Page 1-1, Address changes for the Applicant, Operator and Resident Agent.
- Page 1-3, Resident Agent of Andalex changed to Gary Gray.
- Page 1-6, Address change for Genwal Resources, Inc.
- Page 1-8, Address change for Genwal Resources, Inc.

The format style selected and used by the permittee shows the revision date as a footnote in the lower left hand corner of all of the pages submitted. In an effort to keep this format selection accurate, the revised date should be edited to reflect the date of the current revisions.

Findings:

Information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Prior to approval, the permittee must provide the following in accordance with:

- R645-301-121.300**, The revised date shown on all the submitted pages in the lower left hand corner of the page needs to be updated.

COMPLETENESS

Regulatory Reference: 30 CFR 777.15; R645-301-150.

Analysis:

The Permittee has made adjustments to the acreage identified on page 2-10. In doing so, the Permittee forgot to re-calculate the subtotal sum for Areas Not Topsoiled on page 2-10.

GENERAL CONTENTS

Findings:

The information provided is not completely accurate. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-150, Correct the subtotal sum for Areas Not Topsoiled on page 2-10.

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

Analysis:

Appendix 2-3B contains earlier surveys of the stream soils and south slope affected by the culvert installation (see Finalta.cul). Appendix 2-6 contains the survey conducted on August 18, 1998 by Mr. James Nyenhuis, ARCPACS Certification #2753, of the soils to be affected by the south portal development. The soils are in the Map Unit E, Lucky Star loam, 40 – 80% slopes. The soil is described as a loamy-skeletal, mixed Ustic Haplocryoll with a mollic eppipedon surface layer seven inches thick overlain by a two-inch Oe horizon of semi-decomposed needles and twigs.

Findings:

The information provided is not complete. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-222.100, The soil survey map referred to on page 5 of Appendix 2-6 could not be found.

Page 10

C/015/032-02A

September 19, 2002 **ENVIRONMENTAL RESOURCE INFORMATION**

OPERATION PLAN

September 19, 2002

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

Page 5-30a – 5-30c provides a discussion of the proposed facilities in this amendment. The discussion refers to the addition of three new portals on the south side. The three portals consist of an intake portal, ventilation portal, and belt portal. Discussion is very limited on these structures. Information should be provided as to what type of materials, size, or dimensions will be used for the portal face ups, i.e. concrete, corrugated metal, steel I-Beams.

Information also needs to be provided on the conveyor belt size, length, whether the belt is free standing, or if a support is necessary; is the belt covered, and what efforts are taken to minimize fugitive dust from the conveyor? If a support is necessary, the size of the support foundation and material used for the foundation should be identified.

Questions arise as to the type of fan used, the size of the fan, is the fan foundation a concrete pad, does the fan have a diesel backup, will there be a diesel storage tank at the site, does the tank have the proper containment in case it is ruptured, has the SPCC plan been updated?

The access to the proposed intake portal will now be considered a road and not a parking lot. Map 5-3, which was included in the submittal, indicates an access road with an 11% grade. The classification of the road, whether it is a primary road or ancillary road, should be addressed. The proposed road appears to be a primary road, and therefore, designs of the road need to be addressed and certified, including the size, material utilized, cross sections, drainage controls, and type of surface utilized.

The amendment should also address the reclamation of these facilities, whether the facilities will remain or be removed. Facilities scheduled to be removed should address the handling and/or disposal of the materials generated from reclamation. Reclamation costs associated with the removal of the facilities, soil redistribution, vegetation, sampling, and monitoring should also be given. Once the costs are established, a review of the bond should be conducted to evaluate the adequacy of the bond. There is a high likelihood that the bond will need to be increased.

OPERATION PLAN

The issues raised above are not intended to be a complete list of items identified to be addressed but certainly highlight areas that need to be addressed. The permittee should review the regulations and properly address all pertinent items in the proposed amendment, including, but not limited to those listed above.

Findings:

Information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Prior to approval, the permittee must provide the following in accordance with:

R645-301-526, A comprehensive description of all the proposed facilities, size, materials, maps, cross sections, permits, etc., needs to be included in the amendment.

R645-301-528, A complete narrative explaining the construction, modification, use, maintenance, and removal of facilities needs to be included in the amendment.

AIR POLLUTION CONTROL PLAN

Regulatory Reference: 30 CFR 784.26, 817.95; R645-301-244, -301-420.

Analysis:

A review of the proposed amendment does not provide any information that addresses the impacts to the currently approved air quality permit DAQE-827-01. The construction of the new conveyor out of the south portal will create a new point source. Information should be submitted to the Department of Air Quality to determine if issuance of a new permit is required. Once this determination is received the documentation should be provided to the Division.

Findings:

A review of the proposed amendment does not provide any information that addresses the impacts to the currently approved air quality permit DAQE-827-01. The construction of the new conveyor out of the south portal will create a new point source. Information should be submitted to the Department of Air Quality to determine if issuance of a new permit is required. Once this determination is received the documentation should be provided to the Division.

OPERATION PLAN

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

Subsidence Control Plan

Page 5-21 of the approved MRP states that mining will not occur within 200 feet of the outcrop except for portals. The proposed amendment refers to three new portals in the south portal area. Plate 5-2, Crandall Canyon #1 Mine Mining Projections, shows six portals in the south portal area and also depicts (panel A) mining outside of the outcrop designation. The mining projections need to be revised to indicate three portals in the proposed amendment, not six portals, and a 200' barrier between mining operations and the outcrop. The 200' barrier will eliminate (panel A).

Findings:

Information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Prior to approval, the permittee must provide the following in accordance with:

R645-301-521, Plate 5-2 needs to be revised to accurately depict the mining projections (i.e. three portals not six portals). The mining projections need to be revised to indicate a 200' barrier between the outcrop, as indicated in the approved MRP. Mining sequence and timing for the proposed area needs to be addressed in the amendment and incorporated into the submittal and/or map.

R645-301-525, The amendment needs to address if the current subsidence control plan addresses this area of mining or if modifications are necessary.

R645-301-724, The amendment needs to address if the current baseline data for hydrologic, geologic, and climatologic information applies or if additional baseline information is required.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Topsoil Removal and Storage

The proposed Belt Portal is located in the coal storage area where topsoil has previously been salvaged and stored. The Intake and Fan Portals are located in undisturbed ground and the Permittee will salvage one foot of surface soil prior to construction of the portal canopies. In all, 110 cu yds of topsoil will be salvaged and stored in the #4 Topsoil pile at the mouth of the canyon.

The area of topsoil removal is shown on Figure 8B. This area corresponds with Map Unit E described in Appendix 2-6 by Mr. James Nyenhuis, ARCPACS certification 2753. Mr. Nyenhuis indicates that the upper two feet of the soil is "entirely suitable for salvage...". Therefore, the Permittee should plan for twice the depth of removal presently described. The Permittee should plan for 220 cu yds of topsoil to be salvaged and stored in the #4 Topsoil pile, and for a replacement depth of 16 inches (page 2-10, MRP).

Amendment Number 2 for Special-Use Authorization issued 07/29/97 by the U.S. Department of Agriculture Forest Service allows for the storage of approximately 3,000 cu yds of soil on 0.6 acres. The #4 topsoil pile was designed to accommodate 5,000 cu yds of soil with 3h:1v side slopes (page 2-8, MRP). Topsoil pile #4 currently holds approximately 4,756 cu yds. As Built Plates 2-5, 2-5A, and 2-5B will be required after topsoil salvage from the south portal construction is complete.

The Crandall Canyon Mine obtained approval on June 25, 1997 to bury topsoil in-place beneath construction fill separated from the fill by a layer of different colored fill (marker soil) and geotextile fabric. The acreage receiving such treatment is not disclosed in the MRP. The type of geotextile fabric is not disclosed in the MRP.

This submittal also describes covering the topsoil on the steep south slopes with geotextile prior to construction of a ramp up to the site of the portals, 17 feet above the existing storage yard pad. A cross-section showing the procedure is shown in Figure 5-11. The area to be covered with geotextile during this phase of construction is not disclosed.

OPERATION PLAN

September 19, 2002

The construction fill will be derived from a mix of materials from the portal excavations and imported fill from Nielson Construction commercial borrow pit located in Huntington Canyon (page 2-6a). The quality of the fill is not provided. The quantity of imported fill required is not disclosed. An assurance of non-toxicity, non-acidity of the fill derived from the portal excavation and the Nielson Construction site is required to protect the buried in-place topsoil.

The gravel pit and hillside to be used as a source of fill was evaluated for the presence of noxious weeds by the Utah Department of Agriculture in May of 1997. The noxious weed *Agropyron repens* (l.) Beauv, quackgrass, was noted on the site, but the Agriculture Department representative, Carl Bott, noted that under Section R68-9-4, Number 8 a of the Utah Noxious Weed Act, states that "contaminated soil may be used for restrictive, non-planting purposes upon permission and under the direction of the County Weed Supervisor or a representative of the Utah Department of Agriculture." The condition of the gravel pit should be re-evaluated for noxious weeds by the County Weed Supervisor or a representative of the Utah Department of Agriculture before use.

The submittal indicates on page 2-6b that, "All topsoil removal, salvage and storage will be over-seen, directed and monitored by an independent soil scientist approved by the Division. A report of the topsoil salvage operation will be prepared by the soil scientist and added to the MRP upon completion..."

Findings:

The information provided does not meet the minimum requirements of the Regulations for topsoil removal and storage. Prior to approval, the Permittee must provide the following in accordance with:

- R645-301-231.400,** (1) The plan must describe the current and proposed acreage of topsoil protected by geotextile and describe the type of geotextile used. The acreage could be shown on a figure. (2) Laboratory testing of the fill derived from the portal excavation and the Nielson Construction site is required to provide an assurance of non-toxicity, non-acidity for protection of the buried in-place topsoil. (3) The condition of the gravel pit should be re-evaluated for noxious weeds by the County Weed Supervisor or a representative of the Utah Department of Agriculture before use. (4) The quantity of imported fill must be disclosed with as-built plans.

OPERATION PLAN

R645-301-232.100, Based upon the information supplied in Appendix 2-6, the Permittee should plan for 220 cu yds of topsoil salvaged and stored in the #4 Topsoil pile (page 2-11) and a replacement depth of 16 inches for the south slope portals (page 2-10).

R645-301-231.400, The submittal must indicate that As-Built maps of Topsoil Pile #4, Plates 2-5, 2-5A, and 2-5B, will be provided after soil salvage for construction of the south portals is completed.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Diversions: General

It is unclear in the plan which diversions are already in place, and which are in the planning stages. Pages 1 and 9 of Appendix 7-4 refer to *three* new culverts, though C-11A is the only one that has not been installed. The information provided in the plan should be current, including the use of the proper verb tense when referring to the culverts.

Diversions: Miscellaneous Flows

The plan proposes to add one new culvert in the South Portal area. Culvert C-11A will be placed under the proposed access ramp leading up to the South Portals. This culvert will divert sheet flow drainage from the upper material yard to existing diversions that will carry the flow to the sedimentation pond. Calculations for sizing the culvert were performed using the SCS- TR55 method and Manning's equation, and can be found in Appendix 7-4.

Stream Buffer Zones

According to Plate 7-5, portal construction will take place within 100' of Crandall Creek, a perennial stream. However, this will not affect the quality or quantity of flow in Crandall Creek since the Main Canyon Culvert protects it. The Main Canyon Culvert is 6 feet in diameter and follows the natural channel through the mine site.

OPERATION PLAN

Siltation Structures: Sedimentation Ponds

The disturbed area will not be increased and the existing sedimentation pond was originally sized to accommodate the South Portal expansion. The existing pond should be adequate to control all disturbed area runoff, including that from the new culvert, C-11A.

Findings:

Information provided in the application is not considered adequate to meet the minimum Hydrologic Information requirement of the Regulations. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-121.100, The plan must contain current diversion information. The Sedimentation and Control Plan in Appendix 7-4 is unclear as to which culverts have been placed on the property and which are still in the planning stage. This must be updated.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Mining Facilities Maps

Diversion Ditch 12 is labeled twice on the map, one label does not seem to refer to any accompanying line. The map should be cleared up to omit unnecessary labels and make proper reference to existing and proposed structures.

There is also some confusion as to the length of DD-12. In the existing MRP, it is listed as 560 feet in length, though the accompanying map shows it to be closer to 100 feet. In the current proposal, it is listed as 50 feet in length and is shown as such on the map. This needs to be cleared up.

OPERATION PLAN

Mine Workings Maps

The mine workings map, plate 5-2, does not accurately depict the information submitted in the proposed amendment and/or the approved MRP. The map depicts six portals in the south portal area, while the submittal indicates three portals in the south portal area. The map also depicts that (panel A) being mined outside of the designated outcrop. Page 5-21 of the approved MRP indicates that a 200' barrier between mining and the outcrop will be left to prevent subsidence.

Certification Requirements

Plate 5-2, 5-3, and 7-5 were included in the submittal. The plates contain a P.E. stamp, but do not have a signature or date to validate that the maps were reviewed.

Findings:

Information provided in the application is not considered adequate to meet the minimum Maps, Plans and Cross Sections of Mining Operations requirement of the Regulations. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-121.200, The maps and text in the plan must be clear and concise. The location of DD-12 must be properly marked and any improper labels must be omitted from the maps. Lengths reported in the text must coincide with measured lengths on the maps.

R645-301-521, Plate 5-2 needs to be revised to properly reflect the proposed mining activities. The plate should also include timing and sequence information and commitments made in the approved MRP on page 5-21, i.e., 200' barrier between mining activities and the outcrop.

R645-301-512, The maps should be reviewed and certified by a P.E. to verify their accuracy. The maps have been stamped, but do not have a signature and date to validate that they were reviewed. Plates 7-5, 5-2, and 5-3 must be revised and submitted to the Division with the proper P.E. certification (signed and dated).

RECLAMATION PLAN

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

No information was submitted for reclamation costs, timetables, reclamation cross-section maps, bonding, etc., for the proposed amendment.

Findings:

No information was provided in the proposed amendment. Information needs to be submitted to the Division to meet the requirements of the following sections.

R645-301-542, All plans, maps, surface configurations, timetables, demolition, costs, etc., needs to be submitted for review and approval. No information was submitted.

R645-301-830, Bonding amounts should be reviewed and adjusted as necessary to cover the additional facilities. No information was submitted.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

Redistribution

The total disturbed area of the mine site is 14.18 acres of which 6.37 acres will receive twelve inches of topsoil at final reclamation (Page 2-10 and Appendix 5-22, page 5). An additional 8.63 acres will not receive topsoil during final reclamation as outlined in Section 2.42 of the submittal.

RECLAMATION PLAN

The south portal pocket cuts will be reclaimed in accordance with the MRP procedures described for the portal area (Appendix 5-22). The south portal cuts will be filled and receive one foot of topsoil replacement.

Soils beneath the ramp will be uncovered. Reclamation will follow the approved plan provided in Appendix 5-22.

Findings:

The information provided meets the minimum requirements of the regulations.

O:\015032.CRA\FINAL\ta\TA_02A.doc